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| APPLICATION NUMBER | FILING/RECEIPT DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NUMBER |
|--------------------|---------------------|-----------------------|------------------------|
| 10/061,043 | 01/30/2002 | David J. Glass | REG 753B |

Laura J. Fischer
Regeneron Pharmaceuticals, Inc.
777 Old Saw Mill River Road
Tarrytown, NY 10591

CONFIRMATION NO. 8223

FORMALITIES LETTER



OC000000009531376

Date Mailed: 02/19/2003

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CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE
DISCLOSURES**

Filing Date Granted

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

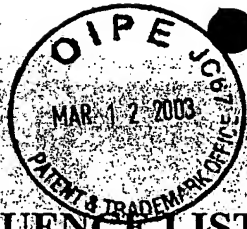
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- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

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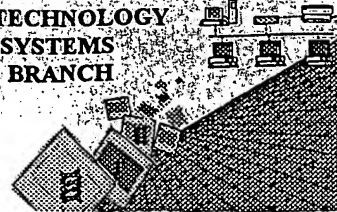
mm

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PART 2 - COPY TO BE RETURNED WITH RESPONSE



BIOTECHNOLOGY
SYSTEMS
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0590
0129

RAW SEQUENCE LISTING ERROR REPORT

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Application Serial Number: 10/061,043
Source: OIPE
Date Processed by STIC: 1/30/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

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Revised 01/29/2002



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/061,043

DATE: 01/30/2003

TIME: 14:45:43

Input Set : A:\REG753B.txt

Output Set: N:\CRF4\01292003\J061043.raw

5 <110> APPLICANT: Glass, David
 7 Bodine, Sue
 11 <120> TITLE OF INVENTION: NOVEL NUCLEIC ACID AND POLYPEPTIDE MOLECULES
 15 <130> FILE REFERENCE: REG 753B
 C--> 19 <140> CURRENT APPLICATION NUMBER: US/10/061,043
 C--> 21 <141> CURRENT FILING DATE: 2003-01-27
 25 <150> PRIOR APPLICATION NUMBER: 60/338,742
 27 <151> PRIOR FILING DATE: 2001-10-22
 31 <150> PRIOR APPLICATION NUMBER: 60/311,697
 33 <151> PRIOR FILING DATE: 2001-08-10
 37 <150> PRIOR APPLICATION NUMBER: 60/264,926
 39 <151> PRIOR FILING DATE: 2001-01-30
 43 <160> NUMBER OF SEQ ID NOS: 48
 47 <170> SOFTWARE: PatentIn version 3.0
 51 <210> SEQ ID NO: 1
 53 <211> LENGTH: 29
 55 <212> TYPE: DNA
 57 <213> ORGANISM: mouse
 61 <400> SEQUENCE: 1
 62 gaacacagga ggagaaactg gaacatgtc 29
 65 <210> SEQ ID NO: 2
 67 <211> LENGTH: 24
 69 <212> TYPE: DNA
 71 <213> ORGANISM: mouse
 75 <400> SEQUENCE: 2
 76 cccgaaatgg cagtatttct gcag 24
 79 <210> SEQ ID NO: 3
 81 <211> LENGTH: 17
 83 <212> TYPE: PRT
 85 <213> ORGANISM: rat
 89 <400> SEQUENCE: 3
 91 Asp Glu Glu Glu Glu Phe Thr Glu Glu Glu Glu Asp Gln Glu
 92 1 5 10 15
 94 Glu
 97 <210> SEQ ID NO: 4
 99 <211> LENGTH: 29
 101 <212> TYPE: DNA
 103 <213> ORGANISM: mouse
 107 <400> SEQUENCE: 4
 108 gaacacagga ggagaaactg gaacatgtc 29
 111 <210> SEQ ID NO: 5
 113 <211> LENGTH: 24
 115 <212> TYPE: DNA

4-5

Does Not Comply
 Corrected Diskette Needed

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/061,043

DATE: 01/30/2003

TIME: 14:45:43

Input Set : A:\REG753B.txt

Output Set: N:\CRF4\01292003\J061043.raw

117 <213> ORGANISM: mouse
 121 <400> SEQUENCE: 5
 122 cccgaaatgg cagtatttct gcag 24
 125 <210> SEQ ID NO: 6
 127 <211> LENGTH: 39
 129 <212> TYPE: PRT
 131 <213> ORGANISM: Homo sapiens
 135 <400> SEQUENCE: 6
 137 Leu Pro Leu Cys Leu Gln Leu Asn Leu Met Gln Arg Leu Ser Asp Gly
 138 1 5 10 15
 140 Arg Asp Leu Val Ser Leu Gly Gln Ala Ala Pro Asp Leu His Val Leu
 141 20 25 30
 143 Ser Glu Asp Arg Leu Leu Trp
 144 35
 146 <210> SEQ ID NO: 7
 148 <211> LENGTH: 39
 150 <212> TYPE: PRT
 152 <213> ORGANISM: Homo sapiens
 156 <400> SEQUENCE: 7
 158 Leu Pro Glu Asp Val Leu Phe His Ile Leu Lys Trp Leu Ser Val Glu
 159 1 5 10 15
 161 Asp Ile Leu Ala Val Arg Ala Val His Ser Gln Leu Lys Asp Leu Val
 162 20 25 30
 164 Asp Asn His Ala Ser Val Trp
 165 35
 167 <210> SEQ ID NO: 8
 169 <211> LENGTH: 39
 171 <212> TYPE: PRT
 173 <213> ORGANISM: Homo sapiens
 177 <400> SEQUENCE: 8
 179 Leu Pro Glu Pro Leu Leu Leu Arg Val Leu Ala Ala Leu Pro Ala Ala
 180 1 5 10 15
 182 Glu Leu Val Gln Ala Cys Arg Leu Val Cys Leu Arg Trp Lys Glu Leu
 183 20 25 30
 185 Val Asp Gly Ala Pro Leu Trp
 186 35
 188 <210> SEQ ID NO: 9
 190 <211> LENGTH: 42
 192 <212> TYPE: PRT
 194 <213> ORGANISM: Homo sapiens
 198 <400> SEQUENCE: 9
 200 Leu Pro Gly Glu Val Leu Glu Tyr Ile Leu Cys Cys Gly Leu Thr Ser
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 203 Ala Ala Asp Ile Gly Arg Val Ser Ser Thr Cys Arg Arg Leu Arg Lys
 204 20 25 30
 206 Leu Cys Gln Ser Ser Gly Lys Val Trp Lys
 207 35 40
 209 <210> SEQ ID NO: 10
 211 <211> LENGTH: 39

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/061,043

DATE: 01/30/2003

TIME: 14:45:43

Input Set : A:\REG753B.txt

Output Set: N:\CRF4\01292003\J061043.raw

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213 <212> TYPE: PRT
215 <213> ORGANISM: Homo sapiens
219 <400> SEQUENCE: 10
221 Leu Pro Leu His Met Leu Asn Asn Ile Leu Tyr Arg Phe Ser Asp Gly
222 1 5 10 15
224 Trp Asp Ile Ile Thr Leu Gly Gln Val Thr Pro Thr Leu Tyr Met Leu
225 20 25 30
227 Ser Glu Asp Arg Gln Leu Trp
228 35
230 <210> SEQ ID NO: 11
232 <211> LENGTH: 37
234 <212> TYPE: PRT
236 <213> ORGANISM: Homo sapiens
240 <400> SEQUENCE: 11
242 Leu Pro Tyr Glu Leu Ala Ile Asn Ile Phe Gln Tyr Leu Asp Arg Lys
243 1 5 10 15
245 Glu Leu Gly Arg Cys Ala Gln Val Cys Thr Trp Lys Val Ile Ala Glu
246 20 25 30
248 Asp Glu Val Leu Trp
249 35
251 <210> SEQ ID NO: 12
253 <211> LENGTH: 38
255 <212> TYPE: PRT
257 <213> ORGANISM: Homo sapiens
261 <400> SEQUENCE: 12
263 Leu Pro Thr Asp Pro Leu Leu Leu Ile Leu Ser Phe Leu Asp Tyr Arg
264 1 5 10 15
266 Asp Leu Ile Asn Cys Cys Tyr Val Ser Arg Arg Leu Ser Gln Leu Ser
267 20 25 30
269 Ser His Asp Pro Leu Trp
270 35
272 <210> SEQ ID NO: 13
274 <211> LENGTH: 37
276 <212> TYPE: PRT
278 <213> ORGANISM: Homo sapiens
282 <400> SEQUENCE: 13
284 Leu Pro Lys Glu Leu Ala Leu Tyr Val Leu Ser Phe Leu Glu Pro Lys
285 1 5 10 15
287 Asp Leu Leu Gln Ala Ala Gln Thr Cys Arg Trp Arg Ile Leu Ala Glu
288 20 25 30
290 Asp Asn Leu Leu Trp
291 35
293 <210> SEQ ID NO: 14
295 <211> LENGTH: 36
297 <212> TYPE: PRT
299 <213> ORGANISM: Homo sapiens
303 <400> SEQUENCE: 14
305 Leu Pro Ile Asp Val Gln Leu Tyr Ile Leu Ser Pro Leu Ser Pro His
306 1 5 10 15

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/061,043

DATE: 01/30/2003

TIME: 14:45:43

Input Set : A:\REG753B.txt

Output Set: N:\CRF4\01292003\J061043.raw

308 Asp Leu Cys Gln Leu Gly Ser Thr Asn His Tyr Trp Asn Glu Thr Val
 309 20 25 30
 311 Arg Asp Pro Ile
 312 35
 314 <210> SEQ ID NO: 15
 316 <211> LENGTH: 39
 318 <212> TYPE: PRT
 320 <213> ORGANISM: Homo sapiens
 324 <400> SEQUENCE: 15
 326 Leu Pro Glu Asn Ile Leu Leu Glu Leu Phe Ile His Ile Pro Ala Arg
 327 1 5 10 15
 329 Gln Leu Leu Leu Arg Cys Arg Pro Val Cys Ser Leu Trp Arg Asp Leu
 330 20 25 30
 332 Ile Asp Leu Val Thr Leu Trp
 333 35
 335 <210> SEQ ID NO: 16
 337 <211> LENGTH: 360
 339 <212> TYPE: PRT
 341 <213> ORGANISM: mouse
 345 <220> FEATURE:
 347 <221> NAME/KEY: ~~misc feature~~
 349 <222> LOCATION: (358)..(358) *what about Xaa at location 353?*
 351 <223> OTHER INFORMATION: Xaa = any amino acid *(see p.5)*
 355 <400> SEQUENCE: 16
 357 Met Pro Phe Leu Gly Gln Asp Trp Arg Ser Pro Gly Trp Ser Trp Ile
 358 1 5 10 15
 360 Lys Thr Glu Asp Gly Trp Lys Arg Cys Asp Pro Cys Ser His Glu Leu
 361 20 25 30
 363 Arg Ser Glu Asp Ser Gln Tyr Thr Ile Asn His Ser Ile Ile Leu Asn
 364 35 40 45
 366 Ser Gly Glu Glu Glu Ile Phe Asn Asn Glu Cys Glu Tyr Ala Ala Lys
 367 50 55 60
 369 Lys Arg Lys Lys Glu His Phe Gly Asn Asp Thr Ala Ala His Ser Phe
 370 65 70 75 80
 372 Tyr Arg Glu Lys Trp Ile Tyr Val His Lys Glu Ser Thr Lys Glu Arg
 373 85 90 95
 375 His Gly Tyr Cys Thr Leu Gly Glu Ala Phe Asn Arg Leu Asp Phe Ser
 376 100 105 110
 378 Ser Ala Leu Gln Asp Ile Arg Arg Phe Thr Tyr Val Val Lys Leu Leu
 379 115 120 125
 381 Gln Leu Ile Ala Lys Ser Gln Leu Thr Ser Leu Ser Gly Val Ala Gln
 382 130 135 140
 384 Lys Asn Tyr Phe Asn Ile Leu Asp Lys Ile Val Gln Lys Val Leu Asp
 385 145 150 155 160
 387 Asp His Gln Asn Pro Arg Leu Leu Lys Gly Leu Leu Gln Asp Leu Ser
 388 165 170 175
 390 Ser Thr Leu Gly Ile Leu Val Arg Gly Val Gly Lys Ser Val Leu Val
 391 180 185 190
 393 Gly Asn Ile Asn Ile Trp Thr Cys Arg Leu Glu Thr Val Leu Ser Trp

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/061,043

DATE: 01/30/2003

TIME: 14:45:43

Input Set : A:\REG753B.txt

Output Set: N:\CRF4\01292003\J061043.raw

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394          195          200          205
396 Gln Gln Gln Leu Gln Asn Leu Gln Val Thr Lys Gln Val Asn Thr Gly
397          210          215          220
399 Leu Thr Leu Ser Asp Leu Pro Leu His Met Leu Asn Asn Ile Leu Tyr
400 225          230          235          240
402 Arg Phe Ser Asp Gly Trp Asp Leu Val Thr Leu Gly Gln Val Thr Pro
403          245          250          255
405 Thr Leu Tyr Met Leu Ser Glu Asp Arg Arg Leu Trp Lys Arg Leu Cys
406          260          265          270
408 Gln Tyr His Phe Ala Glu Gln Gln Phe Cys Arg His Leu Ile Leu Ser
409          275          280          285
411 Glu Lys Gly His Leu Glu Trp Lys Leu Met Tyr Phe Thr Leu Gln Lys
412          290          295          300
414 Tyr Tyr Pro Thr Lys Glu Gln Tyr Gly Asp Thr Leu His Phe Cys Arg
415 305          310          315          320
417 His Cys Ser Ile Leu Phe Trp Lys Asp Ser Gly His Pro Cys Thr Arg
418          325          330          335
420 Ala Asp Pro Asp Ser Cys Phe Thr Pro Val Ser Pro Glu His Glu Ile
421          340          345          350
W--> 423 Xaa Leu Phe Lys Phe Xaa Trp Cys
424          355          360
426 <210> SEQ ID NO: 17
428 <211> LENGTH: 272
430 <212> TYPE: PRT
432 <213> ORGANISM: Homo sapiens
436 <400> SEQUENCE: 17
438 Leu Ile Leu Thr Ser Val Leu Leu Phe Gln Arg His Gly Tyr Cys Thr
439 1          5          10          15
441 Leu Gly Glu Ala Phe Asn Arg Leu Asp Phe Ser Ser Ala Ile Gln Asp
442          20          25          30
444 Ile Arg Thr Phe Asn Tyr Val Val Lys Leu Leu Gln Leu Ile Ala Lys
445          35          40          45
447 Ser Gln Leu Thr Ser Leu Ser Gly Val Ala Gln Lys Asn Tyr Phe Asn
448          50          55          60
450 Ile Leu Asp Lys Ile Val Gln Lys Val Leu Asp Asp His His Asn Pro
451 65          70          75          80
453 Arg Leu Leu Lys Asp Leu Leu Gln Asp Leu Ser Ser Thr Leu Cys Ile
454          85          90          95
456 Leu Thr Arg Gly Val Gly Lys Ser Val Leu Val Gly Asn Ile Asn Ile
457          100          105          110
459 Trp Thr Cys Arg Leu Glu Thr Ile Leu Ala Trp Gln Gln Gln Leu Gln
460          115          120          125
462 Asp Leu Gln Met Thr Lys Gln Val Asn Asn Gly Leu Thr Leu Ser Asp
463          130          135          140
465 Leu Pro Leu His Met Leu Asn Asn Ile Leu Tyr Arg Phe Ser Asp Gly
466 145          150          155          160
468 Trp Asp Ile Leu Thr Leu Gly Gln Val Thr Pro Thr Leu Tyr Met Leu
469          165          170          175
471 Ser Glu Asp Arg Gln Leu Trp Lys Lys Leu Cys Gln Tyr His Phe Ala

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/061,043

DATE: 01/30/2003
TIME: 14:45:44

Input Set : A:\REG753B.txt
Output Set: N:\CRF4\01292003\J061043.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:16; Xaa Pos. 353,358

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/061,043

DATE: 01/30/2003

TIME: 14:45:44

Input Set : A:\REG753B.txt

Output Set: N:\CRF4\01292003\J061043.raw

L:19 M:270 C: Current Application Number differs, Replaced Current Application Number
L:21 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:352